Interactive Voice Response Installation and Configuration Guide



Interactive Voice Response Installation and Configuration Guide

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Chapter 1 About Interactive Voice Response

This guide leads a system administrator through installing and configuring Interactive Voice Response on a Business Communications Manager system.

Interactive Voice Response is an automated telephony application that prompts callers with a combination of recorded menus and prompts, and real-time data from databases. Users enter digits from their touch tone key pad that directs the Interactive Voice Response application to access databases and play information back to the caller.

Interactive Voice Response is a call-handling system that frees up employees to perform their jobs, and agents to make sales, rather than answer frequently asked questions. Interactive Voice Response, can distribute calls, make announcements, and give callers access to relevant information from dynamic databases 24 hours a day, 7 days a week.

This chapter contains

- What you need to know
- Hardware and software requirements
- Interactive Voice Response capacities
- How to get help

What you need to know

To install Interactive Voice Response you must know:

- how to log on to Unified Manager and use the Unified Manager interface.

 Refer to the *Business Communications Manager Programming Operations Guide* for more information.
- how to log on to CallPilot Manager and use the CallPilot Manager interface. Refer to the *CallPilot Manager Set Up and Operation Guide* for more information.
- how to use PeriView. Refer to your PeriView system documentation for more information.
- how to create shared network folders. Refer to your Windows documentation for more information.

Hardware and software requirements

- To install PeriView you must have a computer that runs Windows NT with Service Pack 6.
- You must have an Interactive Voice Response keycode.
- You must have one Client Administration Software License for the Business Communications
 Manager that you use to perform administration using PeriView. You need one license per
 system, not per Business Communications Manager.

Interactive Voice Response capacities

Maximum simultaneous calls	24 (24 voice ports)
Maximum voice ports	32
Maximum voice ports that can be allocated to voicemail	16
Maximum Interactive Voice Response fax calls	2
Maximum fax ports	2
Recording time available on Business Communications Manager for all applications (Interactive Voice Response, CallPilot and Call Center)	20 Gb disk: 325 hours

There are other restrictions that can alter the real number of Voice Ports available on a Business Communications Manager. For more information, refer to the Business Communications Manager Programming Operations Guide, Chapter 15, Configuring the MSC Resources. Voice Ports cannot be shared between voicemail, Call Center and Interactive Voice Response.

How to get help

USA and Canada

Authorized Distributors - Technical Support

Telephone:

1-800-4NORTEL (1-800-466-7835)

If you already have a PIN Code, you can enter Express Routing Code (ERC) 196#.

If you do not yet have a PIN Code, or for general questions and first line support, you can enter ERC 338#.

Website:

http://www.nortelnetworks.com/support

email:

naitas@nortelnetworks.com

Presales Support (CSAN)

Telephone:

1-800-4NORTEL (1-800-466-7835)

Use Express Routing Code (ERC) 1063#

EMEA (Europe, Middle East, Africa)

Technical Support

Telephone:

00800 800 89009

Fax:

44-191-555-7980

email:

emeahelp@nortelnetworks.com

CALA (Caribbean & Latin America)

Technical Support

Telephone:

1-954-858-7777

email:

csrmgmt@nortelnetworks.com

APAC (Asia Pacific)

Technical Support

Telephone:

+61 388664627

Fax:

+61 388664644

email:

asia_support@nortelnetworks.com

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Chapter 2

Installing Interactive Voice Response

This chapter contains:

- Overview of installing Interactive Voice Response
- Enabling the Interactive Voice Response software authorization code
- Making Interactive Voice Response an automatic service
- Administering several Interactive Voice Response systems
- About Installing PeriView
 - Before you install PeriView
 - To install PeriView
- Adjusting the number of voice ports
- Uploading Interactive Voice Response prompts
- Installing the client database software
 - Databases supported on Business Communications Manager
- Configuring host access
- Using PeriView to load and configure scripts
- Dialing the Interactive Voice Response extension
- Assigning lines to Interactive Voice Response

Overview of installing Interactive Voice Response

To install Interactive Voice Response you:

- Enable the Interactive Voice Response software authorization code.
 Refer to "Enabling the Interactive Voice Response software authorization code" on page 11.
- **2** Make sure you have a Client Administration Software License for the BCM that you use to perform administration using PeriView.
- 3 Make Interactive Voice Response an automatic service.
 Refer to "Making Interactive Voice Response an automatic service" on page 13.
- 4 If you are going to use Interactive Voice Response in a multi-node environment, refer to "Administering several Interactive Voice Response systems" on page 14.
- 5 Install PeriView on a Windows NT client PC. Refer to "About Installing PeriView" on page 15.
- **6** Assign Voice Ports to Interactive Voice Response. Refer to "Adjusting the number of voice ports" on page 25.

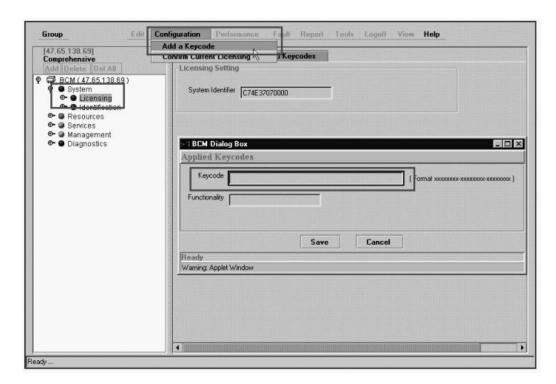
- 7 Upload the Interactive Voice Response prompts to Business Communications Manager. Refer to "Uploading Interactive Voice Response prompts" on page 27.
- 8 Install the Client Database software using the appropriate method if your Interactive Voice Response scripts use database access. Refer to "Installing the client database software" on page 28.
- **9** Configure host access if your Interactive Voice Response scripts use host access. Refer to "Configuring host access" on page 29.
- **10** Use PeriView's Application Manager to load and configure the scripts. Refer to "Using PeriView to load and configure scripts" on page 30 and see the PeriView User's Guide for more details.
- 11 Verify Interactive Voice Response is working by dialing the Interactive Voice Response extension. Refer to "Dialing the Interactive Voice Response extension" on page 35.
- 12 Using CallPilot Manager, assign the lines you want the Interactive Voice Response scripts to answer. Refer to "Assigning lines to Interactive Voice Response" on page 36.
- **13** Back up Interactive Voice Response. Refer to "Backing up and restoring Interactive Voice Response" on page 42.

Enabling the Interactive Voice Response software authorization code

You enable Interactive Voice Response by enabling the Interactive Voice Response software authorization code on the Business Communications Manager Unified Manager.

To enable a software authorization code

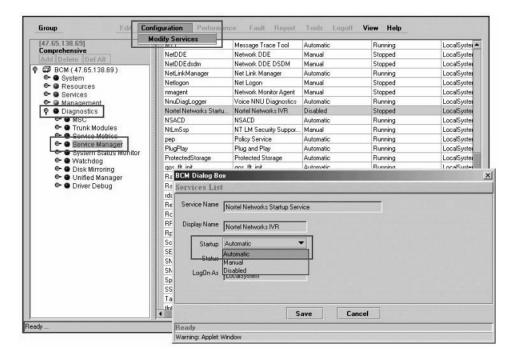
- Point your web browser to the URL http://<xxxx>:6800 where <xxxx> is the domain name or IP address of Business Communications Manager. The Business Communications Manager Unified Manager screen appears.
- 2 Click the **Configure** button. The Login screen appears.
- 3 In the User ID box type your user ID. The default user ID is *supervisor*.
- 4 In the **Password** box type your password. The default password is visor.
- **5** Click the **Login** button. The Unified Manager screen appears.
- 6 Click the **System** key.
- 7 Click the **Licensing** heading. The Licensing Setting screen appears.
- 8 On the Configuration menu click Add a Keycode. The Applied Keycodes screen appears.



- In the **Keycode** box type the number of the Interactive Voice Response software authorization
- **10** Click the **Save** button. A message appears that says you must reboot. **Do not** reboot your system at this time.
- **11** Go to "Making Interactive Voice Response an automatic service" on page 13.

Making Interactive Voice Response an automatic service

- 1 On Unified Manager, click the **Diagnostics** key.
- 2 Click the Service Manager heading. The Services List screen appears.
- 3 In the **Display Name** column select **Nortel Networks IVR**.



- 4 On the **Configuration** menu click **Modify Service**. The Services List dialog box appears.
- **5** From the **Startup** list box select **Automatic**.
- 6 Click the Save button.
- **7** Log off and reboot the system. Interactive Voice Response will start automatically after you reboot.

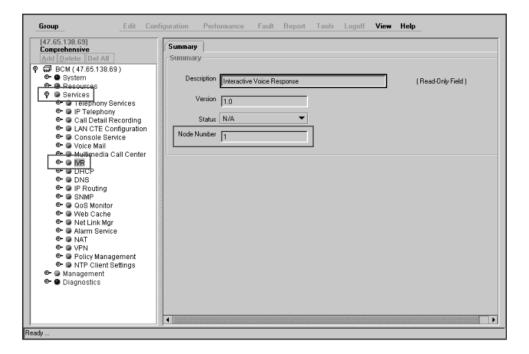
Administering several Interactive Voice Response systems

If you want to use PeriView to administer several Interactive Voice Response systems on different Business Communications Managers, you must assign a different node number to each Interactive Voice Response system.

To change the node number

- **1** Log on to Unified Manager.
- **2** Click the **Services** key.
- **3** Click the **IVR** heading.

The Summary page displays the version, status of the service and the server number. The node number is 1 by default. The node number can be between 1 and 5000.



- 4 Press the **Tab** key to exit from this box. A message appears that says that the Interactive Voice Response service will be temporarily stopped.
- **5** Click the **OK** button.
- You must next install PeriView. Go to "About Installing PeriView" on page 15.

About Installing PeriView

PeriView is the Interactive Voice Response administrative client. You use PeriView to administer Interactive Voice Response scripts on Business Communications Manager. Before you can use PeriView, you must install it on a client computer.

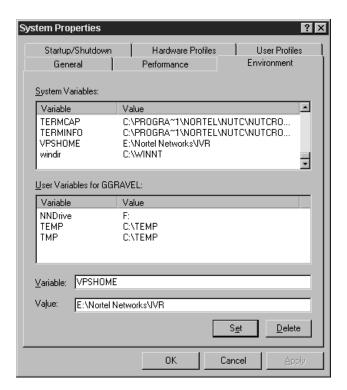
Before you install PeriView

- Make sure you install PeriView on a Windows NT PC. PeriView can be installed on Windows NT only.
- Make sure you have administrative privileges so that you can install services and update environment settings.
- Remove any versions of Perl currently installed on the workstation. PeriView uses a version of Perl specifically designed to work with PeriView. You must remove any other versions of Perl due to potential incompatibility with PeriView.
- Quit all active applications and Nortel Networks or Periphonics services.
- If Windows NT Service Pack 6A is already installed on your system and you are running the Windows Desktop Update option (Active Desktop), deactivate this option. See the Windows NT online help for instructions. Active Desktop affects color renditions in PeriView.

To install PeriView

1. Set up the environment variables

- 1 Click the Windows **Start** button, point to **Settings**, point to **Control Panel** and click **System**. The System Properties page appears.
- 2 Click the **Environment** tab.



- 3 In the **System Variables** list, select any variable.

 The information for the variable is displayed in the Variable and Value boxes.
- 4 Delete the information the **Variable** box, and type **VPSHOME**.
- **5** Delete the information in the **Value** box, and type the path where you want the PeriView software to be installed.
- **6** Click the **Set** button. The Apply button becomes available.
- 7 Click the **Apply** button.
- 8 In the **System Variables** list, select any variable.

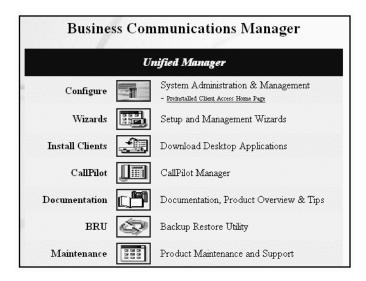
 The information for the variable is displayed in the Variable and Value boxes.
- **9** Delete the information the **Variable** box, and type **ASEHOME**.
- 10 Delete the information in the Value box, and type %VPSHOME%\PERIase.
- **11** Click the **Set** button. The Apply button becomes available.

- Click the **Apply** button.
- In the **System Variables** list, select any variable. The information for the variable is displayed in the Variable and Value boxes.
- Delete the information the **Variable** box, and type **PERL5LIB**.
- Delete the information in the **Value** box and type **%VPSHOME** %**\bin**.
- Click the **Set** button. The Apply button becomes available.
- Click the **Apply** button.
- In the **System Variables** list, select any variable. The information for the variable is displayed in the Variable and Value boxes.
- Delete the information the **Variable** box, and type **MAX_REAL_VPS_NUM**.
- Delete the information in the **Value** box and type **5000**.
- Click the **Set** button. The Apply button becomes available.
- Click the **Apply** button.
- 23 In the System Variables list select the PATH system variable. The information for the variable is displayed in the Variable and Value boxes.
- Put your cursor in the **Variable** box and go to the end of the text string.
- **25** Make sure the text string ends with a semicolon. It you do not see a semicolon, type one.
- After the semicolon, type %VPSHOME%\bin.
- Click the **Set** button.
- Click the **Apply** button.
- Reboot the computer.

2. Download the PeriView client software

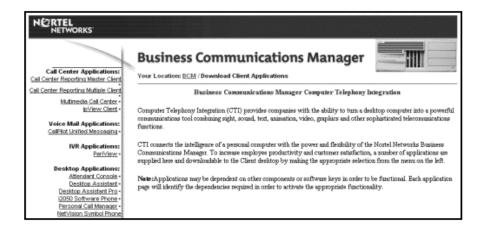
1 On the client computer, point the web browser to the URL http://<xxxx>:6800

where <xxxx> is the domain name or IP address of Business Communications Manager. The Business Communications Manager Unified Manager screen appears.



2 Click the **Install Clients** button.

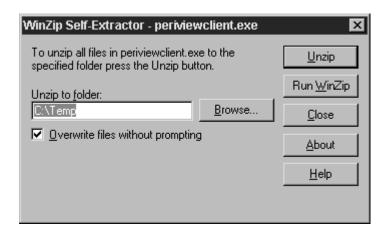
The Download Client Applications page appears.



In the left frame, under the IVR Applications heading, click the PeriView link. The PeriView Client page appears.



- Click the **Download PeriView Client** button.
- 5 Navigate to where you want to download the file to. We recommend you download the file to c:\temp.
- 6 In c:\temp, double-click the self-extracting PeriViewClient.exe file. The WinZip Self-Extractor appears.



3. Install XVision

You must next install XVision. XVision acts as an X-windows environment emulator. After installation is complete, XVision must optimize itself with the display. The optimization process begins after XVision installation finishes.

For maximum use of PeriView, you must add XVision fonts to the system that may be missing, after installing all packages and before using PeriView.

To install XVision

1 In the c:\temp folder, open the preinstall folder, open the XVision7 folder, and double-click setup.exe.

The Setup Wizard window appears.

2 Click the **Next** button.

The Setup Options window appears.

3 Choose the default class of **Typical**, then click the **Next** button.

The Setup Choices window appears.

4 Click the **Next** button to begin installation.

The Optimize X Server window appears.

- 5 In the Optimize X Server window, click the Yes button, then click the Next button.
- **6** Click the **Yes** button to complete the optimization.

The Restart the Computer window appears.

7 Click the **Finish** button.

After the computer reboots and you log back on, the Server Optimization screen appears.

8 On the **Installation Complete** window, click the **Finish** button.

This procedure can take several minutes to complete.

4. Install the Java Runtime Environment (JRE)

If you plan to run PeriReporter on this computer, you need to install the Java Runtime Environment before you can install the PERIprpt package.

1 In the c:\temp folder, open the preinstall folder, open the javaRunTime folder, and double-click j2re-1_3_0_01-win.exe.

The Software License Agreement window appears.

2 Click the **Yes** button.

The Choose Destination Location window appears.

3 Verify the default installation location. To install JRE to a location other than the one shown, click the Browse button, choose the location, and click the OK button. Then click the Next button. You do not need to reboot your system.

5. Install the PeriView Client

- 1 Close any other programs that are running, including any Nortel Networks or Periphonics services.
- 2 In the c:\temp folder, double-click the PERIinstaller folder, and double-click setup.exe. The Welcome window appears.
- **3** Click the **Next** button.

- 4 If any other programs are still running, click the Cancel button and close them. If some Nortel Networks or Periphonics components are already installed on the machine, you may see a message asking whether you want to install or uninstall. Choose Install. The Select Components window appears.
- 5 Click the **Typical** button, then click the **Next** button. The Confirm packages to install window appears.
- **6** Check that these packages are listed:
 - **PERIperl**
 - **PERIgase**
 - **PERIplic**
 - **PERIfw**
 - PERIcmpat
 - **PERIprpt**
 - PERIglobl
 - **PERIview**
 - PERIinvoke
 - **PERIase**
 - **PERIgrs**

If these packages are not listed, contact your Nortel Networks support personnel for additional assistance.

- 7 Click the Yes button to begin installation, or if the packages you want are not listed, click the No button, then click the Exit Setup button.
- **8** Respond to any messages that appear during the installation.
- **9** In the **Continue** window, click the **Yes** button.
- **10** After the final package in your selection is installed, PERIinstaller reboots your machine. Log on if necessary and respond to any messages you receive.

6. Install Patch Bundles

- 1 Close any other programs that are running, including any Nortel Networks or Periphonics services.
- 2 In the c:\temp folder, double-click the PERIPatch folder, and double-click **PERIMPSPatch_Bundle_XX.exe** (where XX is the patch bundle number). The files extract and install to their appropriate locations. This can take several minutes. After the files are installed, the message "Patching is complete" or "Commit Locked Files" appears.
- **3** Click the **OK** button and reboot the system.

7. Set up XVision and TCP/IP

After you install the PeriView packages, add the compiled fonts to XVision and set up TCP/IP transport.

To add compiled fonts

- 1 To launch the XVision server, click the Windows Start button, click Programs, click Vision, and click XVision Server.
- 2 In the system tray, right-click XV and choose Properties. The Properties for XVision window appears.
- 3 Click the **Fonts** tab, then click the **Add** button. The Add New Font Path Item window appears.
- 4 Select the **Fonts Folder** option, then click the **Add** button. The Choose a folder of fonts window appears.
- **5** Select the **XView** folder, then double-click the **Open** button. This adds the C:\Program Files\Vision\Fonts\XView directory to the list in the Properties for XVision window.
- 6 Click the **Apply** button, then click the **OK** button.

To set up TCP/IP transport

For proper operation of the PeriView Software, set the UNIX TCP/IP Transports parameter to Always Enabled.

1 Click the Windows Start button, choose Settings, point to Control Panel and click the Vision Communications icon.

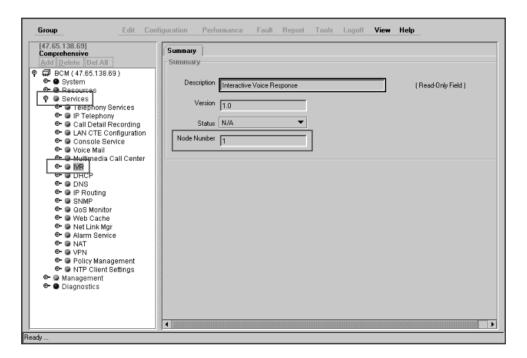
The Visions Communications window appears.

- 2 Click the **Transports** tab, select **TCP-Unix**, then click the **Properties** button. The Transports Properties window appears.
- **3** Click the **Communications** tab.
- 4 Ensure the **Protocol** field contains **TCP/IP**, and the description field is labeled **TCP-Unix**. If not, set these fields to those values.
- 5 Click the **Enable this transport** button.
- 6 Click the **Apply** button, then click the **OK** button.
- 7 On the **Transports** tab of the **Visions Communications** window, click the **Apply** button, then click the **OK** button.

8. Add the Business Communications Manager node number and name to the **VPSHOSTS** file

You must obtain BCM node number and name from Unified Manager for each Business Communications Manager that is to be administered by this PeriView workstation and add them to the vpshosts file.

- **1** Log on to Unified Manager.
- 2 Click the **Services** key and click the **IVR** heading. The node number of the Business Communications Manager is shown in the Node Number box.



3 Open WordPad and edit the vpshosts file in %VPSHOME%\common\etc. At the bottom of the file add the node number of the Business Communications Manager to be monitored, the name of the Business Communications Manager (the default name is NEEDSNEWNAME, and VPS.

For example, if I want my PeriView workstation to monitor my three Interactive Voice Response Business Communications Manager systems, I add these entries at the end of the vpshosts file:

- 1 BCM1 vps
- 2 BCM2 vps
- 3 BCM3 vps

9. Add IP information for the Business Communication Managers to the HOSTS file



Note: Do this procedure only if the Business Communications Manager names that are to be administered by this PeriView workstation cannot be resolved with DNS.

For all BCM names which cannot be resolved with DNS, update the HOSTS file.

- On the workstation where you are installing PeriView, locate the HOSTS file in the folder C:\Winnt\System32\drivers\etc.
- **2** To make sure the HOSTS file is not read-only:
 - Right-click the **HOSTS** file and click **Properties**.
 - Clear the **READ-ONLY** box if it is selected.
- 3 Edit c:\winnt\system32\drivers\etc\HOSTS using Notepad: add the IP address and the BCM name for each BCM to be administered by this PeriView workstation (except the BCM names which can be resolved with DNS) at the end of the Hosts file.

For example, if PeriView needs to administer BCM1, BCM2 and BCM3, the BCM1 IP address can be obtained from a DNS server, but BCM2 and BCM3 cannot. Therefore the hosts file should have these entries:

127.0.0.0 loopback 47.10.10.10 BCM2 47.10.10.20 BCM3

4 Save the changes and close the file.

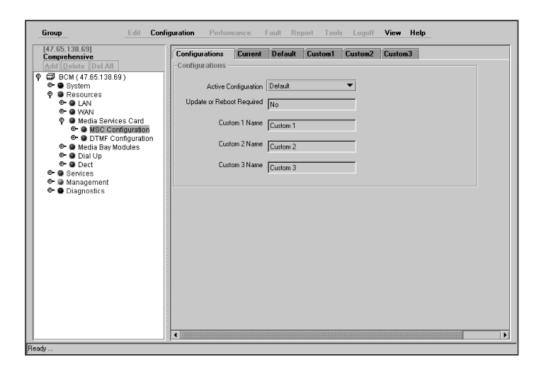
Adjusting the number of voice ports

You can adjust the minimum and maximum number of Interactive Voice Response ports. For more information about voice ports refer to the *Business Communications Manager Programming Operations Guide*.

- The combined maximum number of voice ports for Interactive Voice Response, voicemail and Call Center cannot exceed 32.
- Fax is automatically enabled for Interactive Voice Response and the maximum number of fax port is set to 2.
- The default values for Interactive Voice Response are the number of ports purchased for the maximum, and 2 for the minimum.

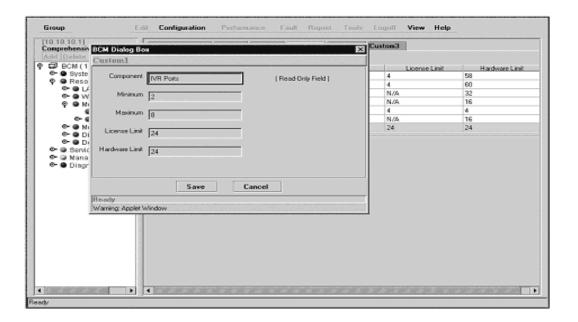
To adjust the number of voice ports

- **1** Log on to Unified Manager.
- **2** Click the **Resources** key.
- **3** Click the **Media Services Card** key.
- 4 Click the **MSC Configuration** heading. The Configurations page appears.



5 To view your current setup, click the **Current** tab.

- 6 If you want to change the number of voice ports, click the tab that has the Custom configuration you want to change, Custom 1,2 or 3. These are the default names.
- 7 In the list, select the **IVR Ports** line.
- 8 On the **Configuration** menu click the name of the profile you want to adjust.



- **9** Change the values in the **Minimum** and **Maximum** boxes.
- 10 Click the Save button.
- 11 If you want to change the amount of fax ports, click the **Fax** line, and on the **Configuration** menu click the name of the setting you want to change.
- **12** Change the values in the **Minimum** and **Maximum** boxes.
- **13** Click the **Save** button.
- **14** Click the **Configuration** tab and from the **Active Configuration** list box, select the setting you adjusted.
- 15 On the Configuration menu click Update Current Configuration.
- **16** After you change the minimum or maximum number of Interactive Voice Response ports or fax ports you must reboot your system.
- **17** Log back on to Unified Manager. You are now ready to upload Interactive Voice Response prompts. Go to "Uploading Interactive Voice Response prompts" on page 27.

Uploading Interactive Voice Response prompts

- Have available the prompts that have been created for your Interactive Voice Response system.
- 2 On a computer that can be accessed on your Business Communications Manager system, create a shared public folder and copy the prompts (mmi and mmd files) to it.
- **3** In Unified Manager, click the **Services** key.
- 4 Click the **IVR** key and click the **IVR Prompts** heading. The IVR Prompts Location Information page appears.
- 5 In the Machine (Name or IP address) box enter the name or IP address of the computer where the prompts are located.
- 6 In the Shared Folder Name box enter the name of the shared folder that contains the mmi and mmd files.
- 7 In the **Subfolder** box enter the subfolder name, if there is one.
- In the **Domain name/User account** box enter the domain name or user account you need to access the shared folder.
- **9** In the **Password** box enter the password for the shared folder, if there is one.
- 10 On the Configuration menu click Apply New IVR Prompts. Business Communications Manager uploads the mmi and mmd files from the shared folder. A message appears that asks you to confirm your choice.
- **11** Click the **OK** button.

While the prompts are being installed Interactive Voice Response service is shut down. After the operation is complete, Interactive Voice Response Service restarts automatically.

Installing the client database software

If your scripts use remote databases refer to the *Business Communications Manager -Interactive Voice Response Integration Supplement* for how to install client database software.

To find Interactive Voice Response guides

- 1 On the Unified Manager main page, click the **Documentation** button. The Documentation, Product Overview & Tips page appears.
- 2 Click the Documentation button. Adobe Acrobat starts and the Business Communications Manager documentation screen appears.



- **3** From the list, select the language you want to view documentation in. The technical and User Documentation page appears.
- 4 Click the **Applications** heading. The Applications page appears.
- **5** Under the **Interactive Voice Response** heading, click the link for the guide you want to access.
 - The pdf of the guide appears.

Databases supported on Business Communications Manager

- Oracle (native and ODBC)
- Sybase (native and ODBC)
- MS SQL Server (native and ODBC)
- DB2 (native and ODBC)
- MS Access (ODBC)

Configuring host access

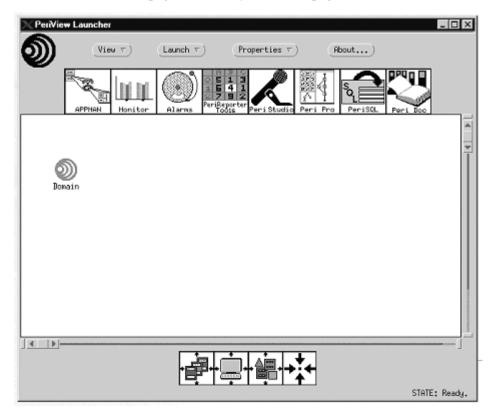
You must configure host access if your Interactive Voice Response scripts use host access. Refer to the Media Processing Server Series COMMGR Reference Manual and the BCM-IVR Integration Supplement for how to configure host access. For how to find the guides, refer to "To find Interactive Voice Response guides" on page 28.

You are now ready to use PeriView, the Interactive Voice Response administration tool, to load and configure scripts. Go to "Using PeriView to load and configure scripts" on page 30.

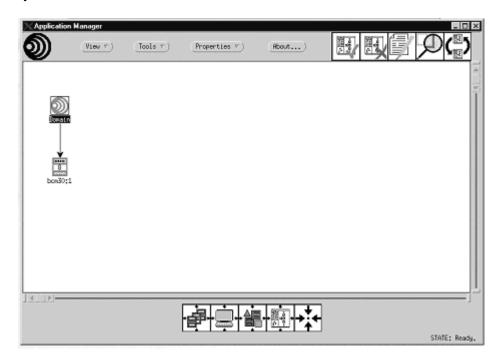
Using PeriView to load and configure scripts

After you have downloaded prompts to your Business Communications Manager system, you must assign scripts to the ports. You do this using PeriView, the Interactive Voice Response administration client.

- Have available the scripts that have been created for your Interactive Voice Response system.
- On the workstation where you installed PeriView software, click the Windows **Start** button, point to **Programs**, click **Nortel** and click **PeriView Launcher**. The PeriView main page appears.
- **3** On the PeriView main page wait until you see this page.



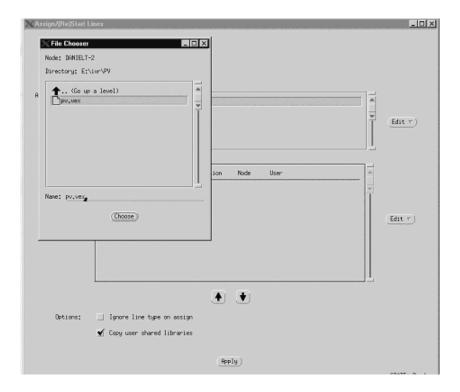
4 Drag the icon to the **Expand** box, the third box from the left at the bottom. This creates a BCM icon that is attached to the Domain icon. In this example, a single-node system is shown.



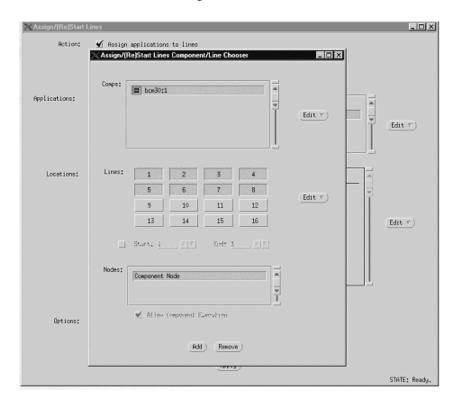
5 Drag the **BCM** icon to the **Appman** box, the first box from the left on the top. The Appman window appears. The BCM and the Domain icons appear in the Appman window.

6 Drag the **BCM** icon to the **Assign Line** box, the first box from the left on the top with the green check mark.

The Assign Line window appears.



- 7 Select the **Assign Line** check box.
- 8 Select the **Start Line** check box.
- **9** Click the **Edit** button on the right of the first scroll menu.
- **10** On your computer, locate the script file. It will have a .vex file extension.



11 Click the **Edit** button on the right of the second scroll menu.

12 If you have between 1-16, or more than 16 Interactive Voice Response ports, double-click the **1-16** button, and click each button that represents the ports you have assigned for Interactive Voice Response

and

if you have more than 16 Interactive Voice Response ports, double-click the **17-32** button and select the ports you want. You can select up to 24. Make sure you don't have more ports selected in PeriView than you have assigned to Interactive Voice Response.

13 Click the **Add** button and close the window. The Assign/(Re)Start Lines screen appears.



- **14** Click the **Apply** button. In the Applications column the name of your script appears beside the lines you selected. Your scripts are now "live".
- 15 Next, go to "Dialing the Interactive Voice Response extension" on page 35 and use Feature 985 to find out what the Interactive Voice Response extension is. Dial this extension to confirm that the appropriate Interactive Voice Response script answers the call.

Dialing the Interactive Voice Response extension

You can use Feature 985 to see what the Interactive Voice Response extension is. Dial this extension to confirm that the appropriate Interactive Voice Response script answers the call.

- On a one-line or two-line display telephone connected to your Business Communications Manager system, press Feature 985. The display shows the Voicemail extension.
- 2 Press the **NEXT** softkey or # to view the Interactive Voice Response extension. The display shows the Interactive Voice Response extension.
- 3 Dial the Interactive Voice Response extension and check that the script answers the call.



Note: You can program the Interactive Voice Response extension to be any extension on Business Communications Manager, for example the prime set for trunks, ringing sets for Night Service, CFNA sets, etc.) For information about changing extensions, see "Changing telephone DNs using the Unified Manager" in the Business Communications Manager Programming Operations Guide.

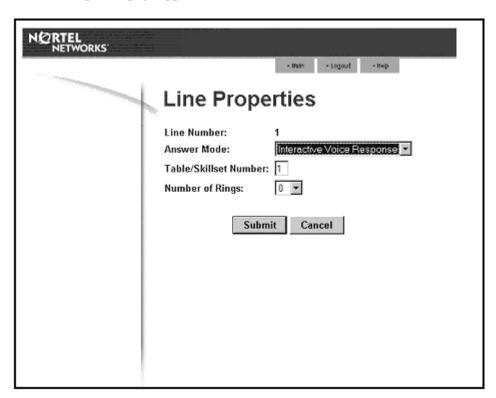
If you change the Interactive Voice Response extension, you must restart Interactive Voice Response service. For how to restart Interactive Voice Response service, see "Stopping, starting or restarting Interactive Voice Response service" on page 40.

Assigning lines to Interactive Voice Response

You can assign which lines answer Interactive Voice Response calls. If you want to assign multiple lines, go to "To assign multiple lines to Interactive Voice Response" on page 37.

To assign lines to Interactive Voice Response

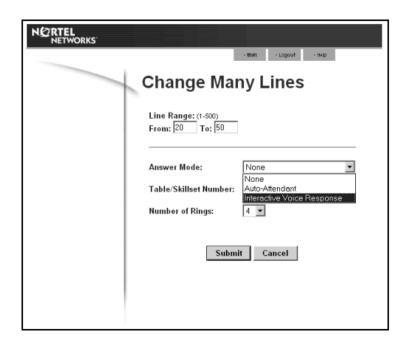
- **1** Log on to CallPilot Manager.
- **2** Click the **Auto-Attendant** heading. The Lines Administration page appears.
- **3** Click the **Change** link for the line you want to assign to Interactive Voice Response. The Line Properties page appears.



- 4 From the **Answer Mode** list box, select **Interactive Voice Response**.
- **5** From the **Number of rings** list box select the number of rings before Interactive Voice Response answers.
 - You must select a number from 0 to 12. If you set the number to less than 2, Caller ID information may not be passed to Interactive Voice Response.
- 6 Press the **Submit** key.

To assign multiple lines to Interactive Voice Response

- Start CallPilot Manager. 1
- 2 Click the **Auto-Attendant** heading.
- 3 Click the Change Many Lines link. The Change Many Lines page appears.



- 4 In the **From** box type the number of the first line to add.
- 5 In the **To** box type the number of the last line to add.
- **6** From the **Answer Mode** list box select **Interactive Voice Response**.
- 7 From the Number of rings list box select the number of rings before Interactive Voice Response answers.
 - You must select a number from 0 to 12. If you set the number to less than 2, Caller ID information may not be passed to Interactive Voice Response.
- Click the **Submit** button.

Viewing or changing the system fax name

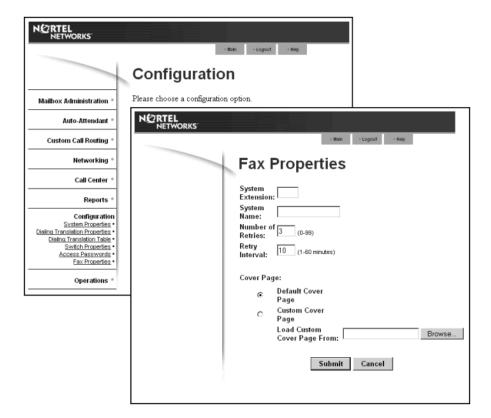
When Interactive Voice Response sends a fax, it uses the system fax name that is programmed in CallPilot Manager. The system name transmits to external fax machines as the station ID of the site. Many fax machines show this value when transmitting or receiving, and record it in transmission logs. If you have not entered a system name no station ID is sent.

The system name can be a maximum of 16 characters. You can use your main fax number as the system name.

To view or change the system fax name

- **1** Start CallPilot Manager.
- 2 Click the Configuration heading.
- 3 Click the Fax Properties link. The Fax Properties page appears. This page can appear differently, depending on your system information.
- 4 If you want to change the system fax name, in the **System Name** box enter a name for your Interactive Voice Response system.

 The name can be a maximum of 16 characters.



Chapter 3

Administering Interactive Voice Response

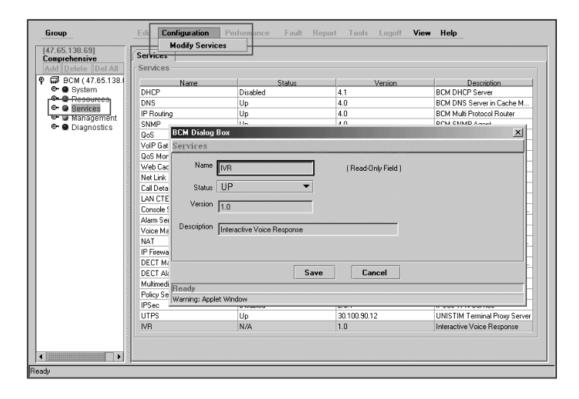
This chapter contains

- Stopping, starting or restarting Interactive Voice Response service
- Changing how Interactive Voice Response service operates after a reboot
- Backing up and restoring Interactive Voice Response
- Creating Interactive Voice Response logs
- Uninstalling PeriView
 - Considerations for uninstalling PeriView
 - Uninstalling the patch bundle
 - Uninstalling packages using PERIinstaller
 - Removing additional files and directories
 - Removing the environment variables
- Creating reports

Stopping, starting or restarting Interactive Voice Response service

- 1 Log on to Unified Manager.
- **2** Double-click the **Services** heading. The Services page appears.
- 3 In the list, select IVR.
- 4 On the Configuration menu click Modify Services.
- **5** From the **Status** list box select **Disabled** to stop Interactive Voice Response service or

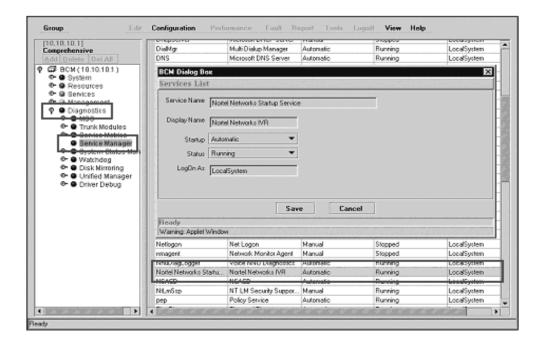
select Enabled to start or restart it.



6 Click the Save button.

Changing how Interactive Voice Response service operates after a reboot

- 1 Log on to Unified Manager.
- **2** Click the **Diagnostics** key.
- 3 Click the Service Manager heading. The Services List page appears.



- 4 In the list select **Nortel Networks IVR**.
- 5 On the Configuration menu click Modify Services.
- 6 If you want to change the mode of Interactive Voice Response operation when you reboot Business Communications Manager, from the **Startup** list box:
 - select **Automatic** if you want Interactive Voice Response service to start automatically when Business Communications Manager reboots
 - select **Manual** if you want to select when Interactive Voice Response service starts after a reboot
 - select **Disabled** if you do not want Interactive Voice Response service to start after a reboot.
- 7 Click the **Save** button.

Backing up and restoring Interactive Voice Response

You can protect your Interactive Voice Response files by backing them up using the Backup and Restore utility (BRU). Interactive Voice Response service stops during a backup and restore.

All Interactive Voice Response voice recordings are backed up whenever you do a backup and restore.

The Backup and Restore utility modifies the Business Communications Manager configuration during the restore if Business Communications Manager is part of a multi-node environment. For example, your node number is reassigned. A multi-node Interactive Voice Response system can be managed from PeriView immediately after a Restore without having to reconfigure it.

For how to perform a backup and restore, refer to "Backup and Restore Utility (BRU)" in the Business Communications Manager Programming Operations Guide.



Note: After you restore, you must:

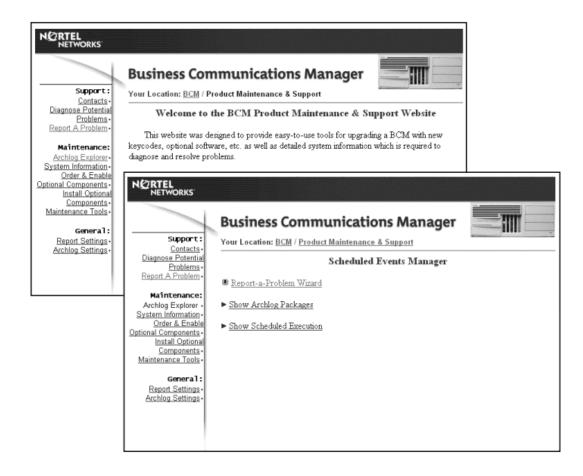
- Assign the Interactive Voice Response lines to no answering while you do these other steps.
 - Refer to "Assigning lines to Interactive Voice Response" on page 36. Instead of selecting Interactive Voice Response, set these lines to no answering.
- **2** Reinstall and reconfigure the database client software. Refer to "Installing the client database software" on page 28.
- **3** Redo the host configuration. Refer to "Configuring host access" on page 29.
- Verify your Interactive Voice Response prompts with Feature 985. Refer to "Dialing the Interactive Voice Response extension" on page 35.
- Reassign your Interactive Voice Response lines. Refer to "Assigning lines to Interactive Voice Response" on page 36.

Creating Interactive Voice Response logs

You can use the Report a Problem Wizard to collect logs for an Interactive Voice Response problem.

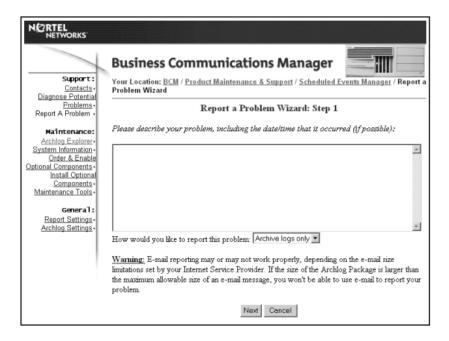
To create Interactive Voice Response logs

- **1** Log on to Unified Manager.
- 2 Click the **Maintenance** button.
- **3** Enter your system administrator user name and password and click the **OK** button. The Maintenance and Support page appears.
- 4 In the left frame, click the **Archlog Explorer** link. The Scheduled Events Manager window appears.



5 Click the **Report-a-Problem Wizard** link.

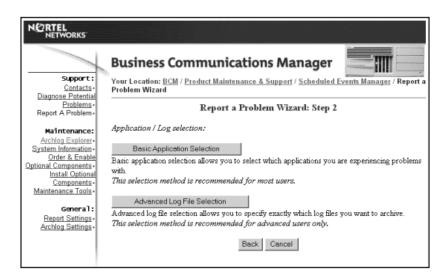
6 In the box provided, describe your problem and click the **Next** button.



7 Click either the:

Basic Application Selection button and go to step 8 or

Advanced Application Selection button and go to step 9.



8 Click the **Interactive Voice Response box**, and logs that pertain to Interactive Voice Response are collected and stored the same way as existing logs for your BCM system.



9 Click the **Interactive Voice Response files** box and logs that pertain to Interactive Voice Response are collected and stored the same way as existing logs for your BCM system. A list of the specific logs collected is displayed.



Uninstalling PeriView

You can remove all installed PeriView packages using PERIinstaller. To completely remove all PeriView packages and related packages such as XVision, follow the complete instructions.

Considerations for uninstalling PeriView

- You must remove the Patch Bundle before you remove other PeriView software.
- Always use PeriInstaller to remove PeriView software. PeriInstaller removes software in the correct order and reboots the system when necessary.
- Do not remove PERIperl until all other PeriView packages have been removed. Other packages rely on PERIperl and may not function properly even if PERIperl is reinstalled. If you accidentally uninstall PERIperl before uninstalling a package that requires PERIperl, uninstall the reliant package, and then reinstall both PERIperl and the reliant package.
- If you later want to use this same application processor to run PeriView Client software again, you will have to completely reinstall all necessary packages according to the instructions in "To install PeriView" on page 16.

Uninstalling the patch bundle

You must remove the patch bundle before you remove PeriView packages.

- 1 On the computer you want to uninstall PeriView from, click the Windows **Start** button, click Settings, and click Control Panel. The Control Panel window opens.
- 2 Double-click the Add/Remove Programs icon.
- 3 Select **PERIMPSPatch Bundle X**, where X represents the pack or bundle version.
- 4 Click the **Add/Remove** button.

Uninstalling packages using PERlinstaller

This procedure removes PeriView packages using PERIinstaller. PERIinstaller uninstalls all PeriView packages in the correct order.

- 1 Quit any programs that are running, including any Nortel Networks or Periphonics services.
- 2 Click the Windows **Start** button and click **Run**.
- 3 In the c:\temp folder, double-click the PERIinstaller folder, and double-click setup.exe. The Welcome window appears.
- 4 Click the **Next** button.
- 5 If any other programs are still running, click the **Cancel** button and close them. A message appears that asks you whether you want to reinstall or uninstall PERI packages.

- 6 Choose Uninstall.
- **7** Respond to any messages during the uninstall. The computer will reboot when necessary.
- 8 To verify that packages uninstalled correctly, use the Windows NT Find function to search the drives for PERI elements. (For example, search on the word "peri".) If you are unsure if a file is used strictly by PeriView packages, either leave the file on the system or contact your Nortel Networks support personnel for additional assistance.
- **9** Be sure to reboot the system after removing the packages. Otherwise files are left queued for removal during reboot. This can cause problems with future installations.

Removing additional files and directories

Some files remain on the system if they can be used by other package versions or if they were created after a package installation. If Nortel Networks packages are no longer being run on the computer where PeriView was installed, you can regain disk space by removing these files.

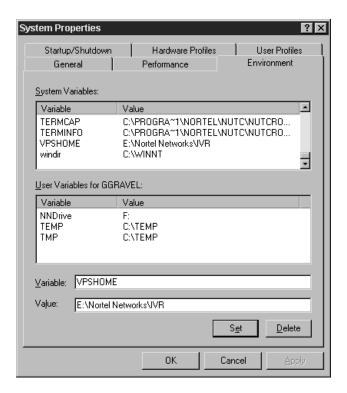
You can remove these files:

- C:\winnt\PERIinstaller
- C:\Winnt\Profiles\All Users\Start Menu\Programs\Nortel
- %VPSHOME% directory (You should be able to find this file in C:\Winnt\system32.

Before you remove %VPSHOME%, you might have to manually remove files and/or directories that were left behind during package uninstalls. To check if all elements are uninstalled, use the Windows NT Find function to search your drives for other related elements. (For instance, search on the word "peri"). If you are unsure if a file is used strictly by Nortel Networks packages, either leave the file on the system or contact your Nortel Networks support personnel for additional assistance.

Removing the environment variables

- 1 Click the Windows **Start** button, click **Settings**, and click **Control Panel**. The Control Panel window appears.
- 2 Double-click the **System** icon. The System Properties window appears.
- **3** Click the **Environment** tab.



- 4 In the list of system variables, select the **VPSHOME** setting, and click the **Delete** button.
- 5 Click the **Set** button.
- 6 Click the **Apply** button.
- **7** Repeat steps 4 through 6 to delete these variables:
 - ASEHOME
 - PERL5LIB
 - MAX_REAL_VPS_NUM
 - NUTROOT
 - TERM
 - TERMCAP
 - TERMINFO
 - PREPORTHOME
- 8 In the list of system variables, select **PATH**. The variable information appears in the variable and value boxes.

- **9** Put your cursor in the value box and move your cursor to the beginning of %VPSHOME%\bin. Delete the text %VPSHOME%\bin.
- **10** Click the **Set** button.
- **11** Click the **Apply** button.
- **12** Click the **OK** button.
- **13** Repeat steps 8 through 12 to delete these variables:
 - C:\PROGRA~1\NORTEL\NUTC\NUTCROOT\bin\
 - C:\PROGRA~1\NORTEL\NUTC\NUTCROOT\bin\x11\
 - C:\PROGRA~1\NORTEL\NUTC\NUTCROOT\mksnt\
 - C:\PROGRA~1\Vision
 - C:\PROGRA~1\Vision\System
 - C:\PROGRA~1\COMMON~1\Vision
- **14** Click the **OK** button to close the window.

Removing Interactive Voice Response, XVision and JRE

After you uninstall PeriView and the environment variables, uninstall Interactive Voice Response, XVision and JRE from your Control Panel Add/Remove Programs window. Refer to your system documentation for how to remove programs.

Creating reports

You can create reports to monitor your Interactive Voice Response activity. For information about how to create reports refer to the *PeriReporter User's Guide* and the *BCM-Interactive Voice Response Integration Supplement*. For how to find the guides, refer to "To find Interactive Voice Response guides" on page 28.

50	Chapter 3 Administering Interactive Voice Response

Chapter 4 Troubleshooting

This chapter describes problems that can occur when you operate Interactive Voice Response, and suggested solutions.

Business Communications Manager is sluggish. Response time is slow

Make sure that the number of scripts assigned to lines via PeriView matches the maximum number of Interactive Voice Response Ports in the MSC Configuration section in Unified Manager. Refer to "Using PeriView to load and configure scripts" on page 30.

Interactive Voice Response is not working after I restore an Interactive Voice Response backup on a new disk

Make sure Interactive Voice Response is not disabled as a service. Refer to "Changing how Interactive Voice Response service operates after a reboot" on page 41.

PeriView cannot see Business Communications Manager

- Make sure that the vpshosts file on the PeriView workstation is properly populated. Refer to "8. Add the Business Communications Manager node number and name to the VPSHOSTS file" on page 22.
- Make sure that the hosts file on the PeriView workstation is properly populated. Refer to "9.
 Add IP information for the Business Communication Managers to the HOSTS file" on page 24.
- Your PeriView workstation has to be on the same subnet as the published IP address that is programmed on your Business Communications Manager system.
- PeriView cannot access a Business Communication Manager system over a modem.

I see errors in the EventViewer on Business Communications Manager for Interactive Voice Response

Some errors can be expected if Interactive Voice Response is running as a service but you have not yet downloaded prompts or assigned scripts to lines. If you have downloaded prompts and configured scripts, check the list of Alarms and SNMP Traps for Interactive Voice Response information. This can help you analyze the problem.

To check the list of Alarms and SNMP Traps:

- **1** Start Unified Manager.
- **2** Click the **Maintenance** button.
- **3** Log on with your user name and password. The Product Maintenance & Support page appears.
- 4 Click the **Alarms and SNMP Traps** link. Review this information for Interactive Voice Response events. For assistance in interpreting this information, contact your next level of support.

Interactive Voice Response is not answering calls

Make sure that Interactive Voice Response is programmed to answer lines. Refer to "Assigning lines to Interactive Voice Response" on page 36.

The Interactive Voice Response call flow is not working as it should be

Contact the organization that created your Interactive Voice Response scripts.

The Interactive Voice Response prompts are too soft, too loud, or have static in them

Contact the organization that recorded your Interactive Voice Response prompts.

Interactive Voice Response doesn't answer calls

Make sure that the maximum number of Interactive Voice Response ports and the maximum number of CallPilot Call Center ports do not add up to less than 3 ports. Refer to "Adjusting the number of voice ports" on page 25.

Interactive Voice Response doesn't recognize key presses

If the call is a direct call from a Companion set, it is not supported. If the call is a call transferred from a DECT set, it is not supported.

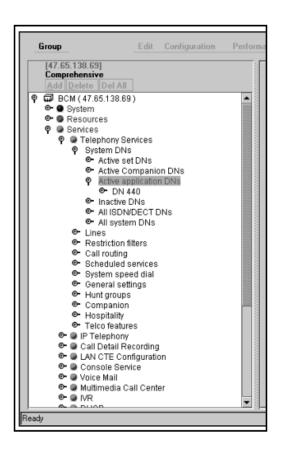
A Call Center skillset is not taking calls after I enabled Interactive Voice Response

Make sure that the skillset DN does not conflict with any active application DNs. To see a list of active applications DNs:

- **1** Log on to Unified Manager.
- **2** Click the **Services** key.
- **3** Click the **Telephony Services** key.
- 4 Click the **System DNs** key.

5 Click the Active application DNs key.

The active application DNs appear under the Active application DNs key.



6 If the skillset DN appears in the list, disable the skillset, change the DN and re-enable the skillset.

When you send or receive faxes, the receiving machine shows that Voicemail is sending and receiving faxes

Make sure that you have set the System Name in the fax Properties page of CallPilot Manager. The name "Voicemail" is the default name if you do not specify a name.

For how to set the system fax name refer to "Viewing or changing the system fax name" on page 38

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